NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
GLENN RESEARCH CENTER (GRC)
CLEVELAND, OHIO

JUSTIFICATION FOR OTHER THAN FULL AND OPEN COMPETITION

PR #4200560274

I. Description of Requirement

I recommend that GRC negotiate only with Linde Cryogenics for the purchase of (1) Linde RSX rotary screw helium compressor.

Currently, the cryopumps that support the vacuum chambers in building 301 at NASA Glenn Research Center only have two viable helium compressors. Both of these compressors must be used simultaneously in order to run both Vacuum Facility (VF) 5 and VF-12 at the same time. NASA requires a third compressor to reduce the risk to programs if one compressor fails. Recently, both of these compressors were down for repairs at different times and NASA could not run VF-5 and VF-12 together. In addition, both compressors are older units and the frequency of downtime for repairs or maintenance will most likely increase. Having a third unit would greatly reduce the risk of extended periods of downtime.

II. Statutory Basis for Other Than Full and Open Competition

The statutory authority permitting other than full and open competition is 10 U.S.C. 2304(c) (1), only one responsible source and no other supplies or services will satisfy Agency requirements, and 10 U.S.C. 2304(g), special simplified procedures.

Rationale In Support of Statutory Authority

There is only one responsible source for this procurement. NASA plans to incorporate this new helium compressor into a system that consists solely of government-owned Linde helium compressors and Linde helium expansion engines. Working together, these units provide helium cooling down to 10°K (-442 Fahrenheit). Installing a (Linde) compressor that is fully compatible with the existing government-owned compressors into the system will save the Government considerable time and expense as the control system already in place was specifically designed and installed for the Linde equipment. This would allow for simple expansion of the current control system and would significantly reduce the time and expense with integration and checkouts. Purchasing from a different manufacturer would require a complete control system rework, which

would result in a substantial duplication of both cost and effort that would not be recovered through competition.

III. Description and Results of Market Research

Market research was conducted using internet based search engines. Numerous companies were displayed and were investigated to see if they could meet the performance criteria of the current Linde helium compressors. Of the companies investigated, none were able to match the minimum required helium flow rate of 220 SCFM. All were in the 40-70 SCFM range. Additionally, the Contracting Officer found a prior NASA post for related Linde items and contacted the Contracting Officer at that respective center to discuss the purchase. In this one case, a sole source to Linde was appropriate as well, and no other manufacturer was able to meet their specifications.

In accordance with FAR 5.2, a description of this requirement was posted to the NASA Acquisition Internet Service/FedBizOpps on September 8, 2015 and closed on September 15, 2015. The results are as follows: No responses were submitted in response to this this procurement.

IV. Determination of Fair and Reasonable Cost

The vendor has submitted a proposal to be evaluated by the Contracting Officer and technical personnel. Additionally, the manufacturer submitted to the Contracting Officer a redacted recent purchase order by another organization for the same compressor. The Contracting Officer compared the prices in the redacted purchase order to the prices that NASA was quoted, and these prices were identical.

VI. Actions to Remove or Overcome Barriers to Competition

No actions can be taken to remove barriers to competition for this procurement for helium compressors as the changes that would be required to the current system would result in substantially higher costs to the government for this procurement action. For future procurements, the Government will use its best efforts to define its requirements in a manner that enables competition to the maximum extent practicable yet is not cost prohibitive.